### (19) World Intellectual Property Organization International Bureau



# ) THE TERM BEING THE THE TREATMENT OF THE TERM BEING THE THE THE TREATMENT OF THE TREATMENT

## (43) International Publication Date 6 May 2005 (06.05.2005)

# (10) International Publication Number

(51) International Patent Classification7:

C12N

WO 2005/040333 A2

- (21) International Application Number:
  - PCT/CA2004/001794
- (22) International Filing Date: 22 October 2004 (22.10.2004)
- (25) Filing Language:

English English

(26) Publication Language:

- (30) Priority Data: 60/514.532
- 24 October 2003 (24.10.2003) US
- (71) Applicant (for all designated States except US): NA-TIONAL RESEARCH COUNCIL OF CANADA? [CA/CA]: 1200 Montreal Road, Building M-58, Room EG12, Ottuwa, Ontario K1A 0R6 (CA).
- (72) Inventors; and
  (75) Inventors/Applicants (for US only): MASSIE, Bernard?
  [CACA]; 6640, rue Riopelle, Laval, Québec H7H 1R3
  (CA), ZENG, Yarf (CNCA]; 72170, rue Chouinard,
  LaSaile, Québec H8N 227 (CA), O'CONNOR-MCCOURT, Maureen? (CACA); 186, Sherbrooke Street,
  Beaconsfield, Québec H9W 1P2 (CA).
- (74) Agent: OGILVY RENAULT; Suite 1600, 1981 McGill College Avenue, Montreal, Québec H3A 2Y3 (CA).

- (81) Designated States (unless otherwise indicated, for recepting of patients), AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BB, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, BG, BS, RI, CB, GD, GE, GH, GM, RH, UI, DI, LB, NS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MM, MW, MX, MZ, NA, NI, NO, XO, MP, GP, HP, HP, FR, OR, RU, SC, SD, SE, SG, SK, SL, SY, TI, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
  - (84) Designated States (unless otherwise indicated, for every knd of regional protection available). ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Burasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), Buropean (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, TL, UJ, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CR, CG, CI, CM, GA, GN, QQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

- without international search report and to be republished upon receipt of that report
- with (an) indication(s) in relation to deposited biological material furnished under Rule 13bis separately from the description

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: LIGAND-PSEUDORECEPTOR SYSTEM FOR GENERATION OF ADENOVIRAL VECTORS WITH ALTERED TROPISM

(57) Abstract: In accordance with the present invention, there is provided a modified virus ablated of its natural receptors interactions with an unmodified or non-naturally occurring cell, said modified virus comprising a non-native polypoptide, said modified tions with an unmodified or non-naturally occurring cell, said modified or non-native polypoptide, and replicating only in cells that can interact with said non-native polypoptide, and replicating only in cells that can interact with said non-native polypoptide, said virus being incepable of infections a cell through a CAR-dependent entry pathway. There is also provided a modified of its peptide, said virus being inemphole of infections a cell through a CAR-dependent entry pathway. There is also provided a modified within the cell interaction of the cells of interactions and cells of its cells of the cell